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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,416	03/31/2004	Goichi Katayama	FS.20132US0A	5739

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EXAMINER

BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,416

Applicant(s)

KATAYAMA, GOICHI

Examiner

Sherman D. Basinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/31/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 24 is objected to because of the following informalities: in claim 24 "the cooling projection" has no clear antecedent. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nozawa et al.

Nozawa et al discloses an outboard motor 20 comprising a housing unit 22 adapted to be mounted on an

associated watercraft, an internal combustion engine 26 disposed on the housing unit 22, and a

cowling 84 surrounding the engine, the cowling having a first inlet port 68 through which atmospheric air enters inside of the cowling, the cowling substantially being made of a nonferrous metal aluminum-see column 4, line 60.

The outboard motor of Nozawa et al has the cowling comprising a bottom cowling member 24 and a top cowling member 84, the bottom cowling member generally extends about a lower portion of the engine, the top cowling member surrounds

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the engine above the bottom cowling member, and a substantial part of the top cowling member is made of the nonferrous metal aluminum. Further the outboard motor of Nozawa et al uses aluminum for the nonferrous metal and the cowling comprises an external wall portion and an internal wall portion together defining an airflow space 70, and

at least one of the external wall portion and the internal wall portions has at least one projection 72 extending into the airflow space.

Nozawa et al also discloses a cowling for an outboard motor having an internal combustion engine 26 comprising a body 84 that is adapted to surround the engine, the body having an opening

through which the engine is capable to pass, the body being made of a nonferrous metal aluminum-see column 4, line 60, and additionally comprising a member 90 attached to the body, the member and the body defining together an airflow space 70 and at least one cooling projection 72

extends from the body into the airflow space.

With regard to claim 24, claim 24 is a product by process claim. Determination of patentability of a product by process claim is based on the product itself. If the product of a product by process claim is the same as the product of the prior art, the claim is unpatentable. See MPEP 2113. In this instance, the cowling of claim 24 is the same product as the cowling of Nozawa et al.

4. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto.

Hashimoto discloses an outboard motor 10 comprising an internal combustion engine appearing partially in figure 3 and a cowling 21,22

surrounding the engine, the cowling comprising an external wall portion 27 and an internal

wall portion shown in figure 4 together defining an airflow space 28 through which atmospheric air flows, at

least one of the external and internal wall portions having at least one cooling fin 44 projecting into the airflow space, and wherein one of the external or

internal wall portions shown in figure 4 forms part of a body of the cowling, the other one of the external

or internal wall portions 27 is a separate member that is attached to the body, and the cooling fin extends from the external or internal wall portion that forms part of the body.

5. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Furukawa.

Furukawa discloses an outboard motor comprising an internal combustion engine 5, and a cowling

surrounding the engine, the cowling comprising a top cowling member 3 and a bottom cowling member 21, the engine being disposed primarily above the bottom cowling member, the top cowling member 3 detachably affixed to the bottom cowling member, the

engine having an air intake device 21, the cowling comprising an external wall portion and

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an internal wall portion 24B together defining an airflow space 24 through which air flows, the airflow space being coupled to the air intake device through 24C when the top cowling member is attached to the bottom cowling member, and wherein at least one of the external and the internal wall portions has a coupling end at which the air intake device is coupled and additionally comprises a seal member 38 interposed between the coupling end and the intake device when the top cowling member is attached to the bottom cowling member.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3, 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki in view of Takada et al and Nozawa et al.

Okazaki discloses the engine 16, the cowling 18, and a first inlet port as that for duct 7 of Takada et al as disclosed in column 2, lines 35-40 of Okazaki.

Okazaki does not disclose the cowling being made of nonferrous metal which includes aluminum. Nozawa et al discloses cowling 84 being made of sheet aluminum. In view of the use of aluminum to make the cowling of Nozawa et al, it would have been

obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the cowling of Okazaki of aluminum.

Motivation to do so is to provide the desirable properties of aluminum to making the cowling of Okazaki. Those desirable properties would be the lightness of aluminum and its resistance to rusting.

The airflow space of claim 9 would be as the space in duct 7 of Takada et al.

The baffle of claim 10 would be back 10 of Takada et al.

The partition of claim 11 would be 27 of Okazaki. The first duct of claim 11 would be as 11 of Takada et al and the second duct would be 33 of Okazaki. In viewing both Okazaki and Takada et al, it is clear that the bottom opening of duct 33 of Okazaki will be higher than the bottom opening of duct 11 of Takada et al.

The first duct of claim 13 will be as 11 of Takada et al and the second duct of claim 13 will be 33 of Okazaki.

8. Claims 1, 3, 4, 8, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al in view of Nozawa et al.

In Takahashi et al the engine is 22 and the cowling is 30. The first inlet port is 190. The cowling is not made of a nonferrous metal which includes aluminum.

Nozawa et al discloses cowling 84 being made of sheet aluminum. In view of the use of aluminum to make the cowling of Nozawa et al, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the cowling of Takahashi et al of aluminum. Motivation to do so is to provide the desirable properties of aluminum to making the cowling of

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Takahashi et al. Those desirable properties would be the lightness of aluminum and its resistance to rusting.

In Takahashi et al the external wall portion is 186, the internal wall portion is the area of cowling 30 below 186 and the airflow space is 180. The projection of claim 4 is 204.

The partition of claim 8 is 188. The second airflow space is 182. The second inlet port is 210 and the second outlet port is 192. With regard to claim 15, second inlet port is closer to the front end portion of the outboard motor than vent 192 which is formed at the rear end portion of the outboard motor.

9. Claims 1-6, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Nozawa et al.

In Hashimoto the engine is partially shown in figure 3, the cowling is 22 and the first inlet port is 29. Hashimoto does not disclose that the cowling is made of a nonferrous metal which includes aluminum.

Nozawa et al discloses cowling 84 being made of sheet aluminum. In view of the use of aluminum to make the cowling of Nozawa et al, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the cowling 22 of Hashimoto of aluminum. Motivation to do so is to provide the desirable properties of aluminum to making the cowling of Hashimoto. Those desirable properties would be the lightness of aluminum and its resistance to rusting.

In Hashimoto the top cowling member is 22, the bottom cowling member is 21, the external wall portion is 27, the internal wall portion is the portion of cowling 22 below

portion 27, the airflow space is 28, and the projection is 44, projection 44 extending from cowling portion 22 which forms the body of the cowling.

With regard to claim 6, claim 6 is a product by process claim. Determination of patentability of a product by process claim is based on the product itself. If the product of a product by process claim is the same as the product of the prior art, the claim is unpatentable. See MPEP 2113. In this instance, the cowling of claim 6 is the same product as the cowling of Hashimoto as modified by Nozawa et al.

The baffle of claim 10 is 26 of Hashimoto.

Airflow space 28 is generally atop the cowling 22.


10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto and Nozawa et al as applied to claim 1 above, and further in view of Haman. Nozawa et al does not disclose making his aluminum cowling as a die cast piece; however, note column 2, line 50 of Haman. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to make the cowling 22 of Hashimoto of die cast aluminum in view of what is taught by Nozawa et al in making his cowling 84 of aluminum and by what is taught by Haman in column 2, line 50. Motivation to make the cowling of Hashimoto of die cast aluminum is to obtain the desirable characteristics of aluminum as pointed out above and to use a process to make an aluminum product which has been proven to be effective and of acceptable cost.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
Primary Examiner
Art Unit 3617
5/10/05

Monday, May 09, 2005